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EXAMINER
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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



**DETAILED ACTION**

1. Claims 1-24 are subject to examination. Claims 19-24 are cancelled.

***Response to Arguments***

2. Applicant's arguments with respect to claims 1, 2, 7, 8, 13 and 14 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cloutier (US 5, 790, 543) in view of Kohiyama et al. (hereinafter Kohiyama)(US 6, 175, 385 B1)

**Referring to claim 1,**

Cloutier teaches an information processing apparatus comprising:

first extraction means for extracting a reproduction time from stream data;  
second extraction means for extracting a reception time of said stream data (col. 4, line 60-64, "According to the present invention, a method for measuring jitter in a transport stream of digitally-compressed data packets, such as MPEG-encoded data packets, includes the steps of detecting time stamp values such as program clock reference

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(PCR) values from the transport stream, each pair of time stamps representing an expected interarrival time of a corresponding data packet stream segment.”);

computation means for computing a difference between said reception time and said reproduction time (col. 4, line 65-col. 5, line 5, “An actual interarrival time for the corresponding data packet stream segment is determined in response to an independent clock signal. The expected interarrival time of the data packet stream segment is compared with the corresponding actual interarrival time to detect the jitter in the data packet stream segment from the data packet stream.”); and adjustment means for adjusting a reproduction time on the basis of said difference (col. 5, line 5-10, “The detected jitter can be applied to a data packet stream correction circuit to output the received data packet stream as a corrected data packet stream having time stamps substantially coinciding with the actual time duration of the corresponding data packet stream segment of the corrected data packet stream.”).

Cloutier does not teach adjustment means for adjusting a reproduction time on the basis of said difference by adding/subtracting a time equivalent to one clock to/from each steam data packet on which the difference is equivalent to one clock.

Kohiyama teaches adjustment means for adjusting a reproduction time on the basis of said difference by adding/subtracting a time equivalent to one clock to/from each steam data packet on which the difference is equivalent to one clock (col. 12, line 18-29, col. 14, 15-18, col. 19, line 28-34).

To provide the device of Cloutier with an adjustment means for adjusting a reproduction time on the basis of said difference by adding/subtracting a time equivalent

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to one clock to/from each stream data packet on which the difference is equivalent to one clock would have been obvious to one of ordinary skill in the art, in view of the teachings of Kohiyama, since all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods (clamping) with no change in their respective functions, and the combination would have yielded nothing more than predictable results to one of ordinary skill in the art at the time of the invention, i.e., one skilled in the art would have recognized that the if the difference between the reproduction time and the reception time is of one clock then the adjustment can be easily made to coincide the time stamps from the easily inexpensive available Kohiyama's circuit as indicated clearly by Kohiyama at col. 2, line 40-44 "An object of the present invention is to provide an inexpensive digital PLL circuit that employs no DA converter or VCO. Another object of the present invention is to provide an inexpensive MPEG decoder employing such a PLL circuit."

**Referring to claim 2,**

Cloutier teaches an information processing apparatus comprising:

first extraction means for extracting an interval of reproduction time between packets of stream data (col. 4, line 60-64, "According to the present invention, a method for measuring jitter in a transport stream of digitally-compressed data packets, such as MPEG-encoded data packets, includes the steps of detecting time stamp values such as program clock reference (PCR) values from the transport stream, each pair of time stamps representing an expected interarrival time of a corresponding data packet stream segment.");

second extraction means for extracting an interval of reception time between packets of said stream data time; and computation means for computing a difference between said interval of reproduction time and said interval of reception time (col. 4, line 65-col. 5, line 5, "An actual interarrival time for the corresponding data packet stream segment is determined in response to an independent clock signal. The expected interarrival time of the data packet stream segment is compared with the corresponding actual interarrival time to detect the jitter in the data packet stream segment from the data packet stream."); adjustment means for adjusting a reproduction time on the basis of said difference (col. 5, line 5-10, "The detected jitter can be applied to a data packet stream correction circuit to output the received data packet stream as a corrected data packet stream having time stamps substantially coinciding with the actual time duration of the corresponding data packet stream segment of the corrected data packet stream.").

Cloutier does not teach adjustment means for adjusting a reproduction time on the basis of said difference by adding/subtracting a time equivalent to one clock to/from each steam data packet on which the difference is equivalent to one clock.

Kohiyama teaches adjustment means for adjusting a reproduction time on the basis of said difference by adding/subtracting a time equivalent to one clock to/from each steam data packet on which the difference is equivalent to one clock (col. 12, line 18-29, col. 14, 15-18, col. 19, line 28-34).

To provide the device of Cloutier with an adjustment means for adjusting a reproduction time on the basis of said difference by adding/subtracting a time equivalent

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to one clock to/from each steam data packet on which the difference is equivalent to one clock would have been obvious to one of ordinary skill in the art, in view of the teachings of Kohiyama, since all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods (clamping) with no change in their respective functions, and the combination would have yielded nothing more than predictable results to one of ordinary skill in the art at the time of the invention, i.e., one skilled in the art would have recognized that the if the difference between the reproduction time and the reception time is of one clock then the adjustment can be easily made to coincide the time stamps from the easily inexpensive available Kohiyama's circuit as indicated clearly by Kohiyama at col. 2, line 40-44 "An object of the present invention is to provide an inexpensive digital PLL circuit that employs no DA converter or VCO. Another object of the present invention is to provide an inexpensive MPEG decoder employing such a PLL circuit."

**Referring to claim 3,**

Cloutier teaches the information processing apparatus according to claim 2, wherein said reproduction time is a time stamp (col. 4, line 60-64, "According to the present invention, a method for measuring jitter in a transport stream of digitally-compressed data packets, such as MPEG-encoded data packets, includes the steps of detecting time stamp values such as program clock reference (PCR) values from the transport stream, each pair of time stamps representing an expected interarrival time of a corresponding data packet stream segment.")

**Referring to claim 4,**

Cloutier teaches the information processing apparatus according to claim 2, further comprising:

first accumulation means for accumulating intervals of reproduction time between a predetermined number of consecutive packets of said stream data to obtain a first time (col. 4, line 60-64, "According to the present invention, a method for measuring jitter in a transport stream of digitally-compressed data packets, such as MPEG-encoded data packets, includes the steps of detecting time stamp values such as program clock reference (PCR) values from the transport stream, each pair of time stamps representing an expected interarrival time of a corresponding data packet stream segment."); and

second accumulation means for accumulating intervals of reception time between said predetermined number of consecutive packets of said stream data to obtain a second time (col. 4, line 65-col. 5, line 5, "An actual interarrival time for the corresponding data packet stream segment is determined in response to an independent clock signal. The expected interarrival time of the data packet stream segment is compared with the corresponding actual interarrival time to detect the jitter in the data packet stream segment from the data packet stream.") wherein said computation means computes a difference between said first time and said second time (col. 5, line 5-10, "The detected jitter can be applied to a data packet stream correction circuit to output the received data packet stream as a corrected data packet stream having time stamps substantially coinciding with the



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actual time duration of the corresponding data packet stream segment of the corrected data packet stream.").

**Referring to claim 5,**

Cloutier teaches the information processing apparatus according to claim 4, further comprising:

smoothing means for smoothing said difference between said first time and said second time (col. 5, line 5-10, "The detected jitter can be applied to a data packet stream correction circuit to output the received data packet stream as a corrected data packet stream having time stamps substantially coinciding with the actual time duration of the corresponding data packet stream segment of the corrected data packet stream.").

**Referring to claim 6,**

Cloutier teaches the information processing apparatus according to claim 5, wherein said adjustment means adjusts reproduction time information (col. 5, line 5-10, "The detected jitter can be applied to a data packet stream correction circuit to output the received data packet stream as a corrected data packet stream having time stamps substantially coinciding with the actual time duration of the corresponding data packet stream segment of the corrected data packet stream.")however, Cloutier fails to teach wherein said adjustment means adjusts reproduction time information by adding a time equivalent to one clock to said reproduction time or subtracting said time from said reproduction time for each number of packets with which said difference between said

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first time and said second time smoothed by said smoothing means provides a deviation equivalent to one clock.

Kohiyama teaches wherein said adjustment means adjusts reproduction time information by adding a time equivalent to one clock to said reproduction time or subtracting said time from said reproduction time for each number of packets with which said difference between said first time and said second time smoothed by said smoothing means provides a deviation equivalent to one clock (col. 12, line 18-29, col. 14, 15-18, col. 19, line 28-34).

To provide the device of Cloutier with an adjustment means for adjusting a reproduction time on the basis of said difference by adding/subtracting a time equivalent to one clock to/from each steam data packet on which the difference is equivalent to one clock would have been obvious to one of ordinary skill in the art, in view of the teachings of Kohiyama, since all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods (clamping) with no change in their respective functions, and the combination would have yielded nothing more than predictable results to one of ordinary skill in the art at the time of the invention, i.e., one skilled in the art would have recognized that the if the difference between the reproduction time and the reception time is of one clock then the adjustment can be easily made to coincide the time stamps from the easily inexpensive available Kohiyama's circuit as indicated clearly by Kohiyama at col. 2, line 40-44 "An object of the present invention is to provide an inexpensive digital PLL circuit that

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employs no DA converter or VCO. Another object of the present invention is to provide an inexpensive MPEG decoder employing such a PLL circuit."

**Referring to claim 7,**

Claim 7 is a claim to an information processing method comprising steps that are carried out by the apparatus of claim 1. Therefore, claim 7 is rejected for the reasons set forth for claim 1.

**Referring to claim 8,**

Claim 8 is a claim to an information processing method comprising steps that are carried out by the apparatus of claim 2. Therefore, claim 8 is rejected for the reasons set forth for claim 2.

**Referring to claim 9,**

Claim 9 is a claim to the information processing method comprising steps that are carried out by the apparatus of claim 3. Therefore, claim 9 is rejected for the reasons set forth for claim 3.

**Referring to claim 10,**

Claim 10 is a claim to the information processing method comprising steps that are carried out by the apparatus of claim 4. Therefore, claim 10 is rejected for the reasons set forth for claim 4.

**Referring to claim 11,**

Claim 11 is a claim to the information processing method comprising steps that are carried out by the apparatus of claim 5. Therefore, claim 11 is rejected for the reasons set forth for claim 5.

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**Referring to claim 12,**

Claim 12 is a claim to the information processing method comprising steps that are carried out by the apparatus of claim 6. Therefore, claim 12 is rejected for the reasons set forth for claim 6.

**Referring to claim 13,**

Claim 9 is a claim to a computer-readable medium that is computer-readable storing a computer program, the program comprising the steps that are carried out by the apparatus of claim 1. Therefore, claim 13 is rejected for the reasons set forth for claim 1.

**Referring to claim 14,**

Claim 14 is a claim to a computer-readable medium that is computer-readable storing a computer program, the program comprising the steps that are carried out by the apparatus of claim 2. Therefore, claim 14 is rejected for the reasons set forth for claim 2.

**Referring to claim 15,**

Claim 15 is a claim to a computer-readable medium that is computer-readable storing a computer program, the program comprising the steps that are carried out by the apparatus of claim 3. Therefore, claim 15 is rejected for the reasons set forth for claim 3.

**Referring to claim 16,**

Claim 16 is a claim to a computer-readable medium that is computer-readable storing a computer program, the program comprising the steps that are carried out by

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the apparatus of claim 4. Therefore, claim 16 is rejected for the reasons set forth for claim 4.

**Referring to claim 17,**

Claim 17 is a claim to a computer-readable medium that is computer-readable storing a computer program, the program comprising the steps that are carried out by the apparatus of claim 5. Therefore, claim 17 is rejected for the reasons set forth for claim 5.

**Referring to claim 18,**

Claim 18 is a claim to a computer-readable medium that is computer-readable storing a computer program, the program comprising the steps that are carried out by the apparatus of claim 6. Therefore, claim 18 is rejected for the reasons set forth for claim 6.

***Conclusion***

**Examiner's note:** Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashok B. Patel whose telephone number is (571) 272-3972. The examiner can normally be reached on 6:30 am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan A. Flynn can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For

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more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Ashok B. Patel/

Primary Examiner, Art Unit 2154